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ABSTRACT

The Mexican American's education is affected by such societal factors as the (1) referent used to identify these Americans; (2) relationships created and affected by historical events; (3) access to participation in the educational process at the elementary, secondary, and post-secondary levels; (4) curriculum offering at all levels; and (5) retention efforts provided within the educational system. Therefore, the educational status of Chicanos can be judged only in relation to the education provided to all Americans. This manuscript discusses the educational status of the Mexican American by: (1) examining the Chicano's nature as that nature is affectd by historical events and by the referents used in identification; (2) looking at the nature and state of education in light of assumptions, philosophy and principles of learning, disparities of teacher behavior, inequities of school facilities, and irrelevant curriculum; and (3) reviewing the Chicano's participation in the educational process through access, educational attainment, and retention. The manuscript concludes with 17 recommendations, e.g., re-examination of current policies and practices, new testing and grading, academic and personal support systems, better career counseling, strong minority leadership at the community level, and mode of delivery of instruction to accommodate the cognitive learning styles of Mexican American students. (NQA)

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EDUCATION OF THE MEXICAN AMERICAN IN THE UNITED STATES:

PROGRESS AND STALEMATE

By

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March 1983

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PREFACE

This document is designed to provide information about the status of education of the American of Mexican descent who is more commonly labeled Mexican American (Chicano). The writer has endeavored to objectively analyze and synthesize researched interpretations of many studies that have been done about the Mexican American throughout the United States, the Southwest, and the State of New Mexico. The citations on concrete points are included for clarification. The illustrations are presented for precedent value on substantive points that apply to educational matters affecting the Chicano.

The education of the Mexican American is affected by societal factors. A change in these societal factors would mean more equitable access and ultimate greater difference in economic and societal assignment for this ethnic group. Among the societal factors that affect the education of this group are: (1) the referent used to identify this American; (2) the relationships created and affected by historical events; (3) the access to participation in the process of education at the elementary, secondary, and post secondary levels; (4) the curriculum offering at all these levels; and (5) the retention efforts provided within the educational system. Therefore, the status of the education of the American of Mexican descent can be judged only in relation to the education provided to all Americans. The data reviewed, analyzed, and synthesized from current educational literature and the 1980 census data reflects its comparative nature.

Those who might feel that this manuscript has been written from selected evidence need only inform themselves of research encouraged by multicultural policy. There is enormous evidence on record that reveals a candid racist tone of the concept Anglo Americans have held of "Mexicanos" which transcends time.

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ABSTRACT

This manuscript discusses the educational status of the Mexican American (Chicano). This is done first by examining the nature of the Mexican American as that nature is affected by historical events and by the referents used in identification; second, by looking at the nature and state of the education in light of assumptions, philosophy and principles of learning, disparities of teacher behavior, inequities of school facilities, and irrelevant curriculum; and third, by reviewing the Chicano's participation in the educational process through access, educational attainment, and retention. Finally, there are recommendations made by researchers and by the author.

The rhetorical question of progress or stalemate is developed through information and an inevitable inference. The disproportionate progress results in inferred stalemate.

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INTRODUCTION

According to Thomas P. Carter (1970), the history of the education of the Mexican American (Chicano)* within the educational system of the United States is one of educational neglect. This neglect is reflected by the curriculum offered, by the disparity in teachers' behavior toward the Mexican American student, by the inequities of school facilities, and by the effort made to intervene in the dropout of the Mexican American student. The progress of the education of the Mexican American within the system remains disproportionate (Carter, 1970; Astin, 1982). For example, of every 100 Mexican American elementary students enrolled in the first grade, 88 complete the eighth grade, but only 50 complete high school (Carter, 1979). Furthermore, the Mexican American represents 2.9% of the United States' public university full-time enrollment and 6.4% of the two-year college enrollment (De Los Santos, 1980). Therefore, this disproportionate progress is interpreted as stalemate in the education of the Mexican American.

These statistics are overpowering, particularly when the 1980 census count shows that 20 million Hispanics currently live in the United States and that of this population 6 million are Mexican American. The data also indicates that this population is the youngest among all groups, which means the percentage of students is sizable (Arce, 1978). These millions of Mexican Americans deserve more equitable access and an improved quality of education to overcome the stalemate.

This manuscript is based mainly on information already researched and is intended for professionals, paraprofessionals, and other persons interested and involved in the education of this American. It is done with the hope that these persons will concern themselves ultimately with improving the system that serves the Mexican American. Intelligent decisions on the latter are dependent upon knowledge of the former.

This manuscript is written with four goals in mind. The first goal is to reveal the nature of the Chicano as it is molded by social and historical factors. One factor is the dilemma of an appropriate term of identification which subtly influences the education of the Mexican American. The second goal is to review the nature and state of the education of the Mexican American in light of the assumptions made

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*The terms Mexican American and Chicano are used interchangeably throughout the paper to refer to individuals of Mexican origin in the United States.

about this American, in light of the principles of learning and their application to the education of the Mexican American, in light of the disparities of teacher behavior toward the Mexican American, and in light of the inequities of school facilities and the irrelevant curriculum offered to the Chicano student. The third goal is to examine the participation of the Mexican American in the educational process in terms of access, educational attainment, and retention. The fourth goal is to provide recommendations from researchers and these authors on how education can be improved to increase the achievement of the Mexican American.

This author assumes each goal is important to persons interested in the education of the Chicano. The information regarding research is valuable to educators. To keep instruction relevant, however, educators as researchers must use variables that are accurate, consistent, and appropriate so that research can be reliable and valid. Also, public education, as an instrument of society, was instituted to carry out a function which society considers desirable. That function, education, must be equitable to all its people.

THE NATURE OF THE MEXICAN AMERICAN

The nature of the Mexican American is a result of many environmental factors. Two of these factors are historical events and the dilemma of an appropriate term of identification. Both of these factors are intertwined; however, their effects set a precedent on attitudes and interrelationships between the Anglo American and the Mexican American and continue to influence the status and the education of the Chicano.

History

In 1822, the Santa Fe trade began along a route from Independence, Missouri through Council Grove, Arkansas to Cimarron and Las Vegas and on through to Santa Fe (Moquin and Van Doren, 1972). This commercial connection with the United States brought Americans into Mexico. Consequently, many Americans settled there. Thus the northwestern part of Mexico, later known as New Mexico, Texas, and California, gained a population of Americans whose loyalties were not with Mexico. This population also brought social and religious institutions that were at variance with the inhabitants of the region (Griswold del Castillo, 1979). This was the beginning of the perils that Mexican residents endured and that their descendents continue to endure.

The beginning of Anglo American rule in the Southwest came in 1848 with the Treaty of Guadalupe Hidalgo. With this treaty, Mexican residents of the conquered area (now the Southwest) became citizens of the United States. This citizenship did not earn them the right to be identified as American. They were still only to be identified as Mexican American. The Anglo American society has been consistent in its use of the term since the takeover of the Southwest. The term Mexican American was perhaps accurate for 1848, given the birthplace of the people, but was the term accurate given the allegiance pledged to the United States? Is the term accurate today? The implication of the term is as obvious today as it was in 1848. A hyphenated American term gives conditional recognition as an American and thus relegates those Americans to second-class citizenship.

Weber (1982), in his synthesis of the Mexican frontier, sheds new light on the history of the Southwest. His perspective of the history is Mexican rather than American. He includes information unfamiliar to most historians and covers the era through annexation, conquest, and purchase. He reveals that American historians' nationalistic perspective reduced Mexico's involvement as static and thus created stereotypes that historians reported as facts.

The impact and change of the takeover affected the Mexican Americans negatively because they were treated as immigrants instead of as the residents they were and as their ancestors of 200 years had been. For example, those living in Texas and California saw their ranch economy broken by a new socioeconomic and political order (De Leon, 1982). The new laws, taxes, and language caused violence (Griswold del Castillo, 1979). These conflicts with the Anglo immigrants before annexation (Acuna, 1972) were translated into defeat, setting the pattern for future relations, i.e., they were treated as foreigners in their native land (Weber, 1973; De Leon, 1982). Mexicans were perceived as foreigners and enemies who had to be controlled and kept "in their place" (Pitt, 1966; Weber, 1973). Those living in New Mexico at the time of takeover had well-established social and political institutions of the 1600's. These were allowed to remain intact. Anglo Americans shared leadership and ultimately gained control by reducing the Mexican American's economic and political participation (Garcia, 1977). The Mexican Americans, as residents and citizens of the territory of New Mexico, later tried to protect the rights quaranteed to them and future generations by the Treaty of Guadalupe Hidalgo. When the territory became a state, they included provisions in the constitution of the State of New Mexico. One of those provisions was the use of bilingual teachers in the education of New Mexicans. Another provision was the use of the Spanish language in the schools and on the election ballots. Regardless of these provisions, laws went unenforced and rights were eroded (Appendix A).

Historically, as early as 1848, the residents of Mexican descent in the territory of New Mexico learned that the rights and privileges that had been promised by the Treaty of Guadalupe Hidalgo were quickly denied (Garcia, et al., 1977). This denial permeated all aspects of life, particularly the educational aspects. Most of the first century of that rule passed with little concern from the Anglo society about the education of the Mexican American.

In their 150 years of United States citizenship, Mexican Americans have witnessed years of continuous frustration, protest, and coping. The events of the past decades are the manifestation of the frustration these Americans encountered in attempts to become fully participating Americans. Their reactions have run the gamut--from forced acquiescence to militancy.

Identification

The nature of the Mexican American is affected by the dilemma of an appropriate term of identification. The Mexican American is referred to by many different names: Mexican, Latin, Spanish speaking, Mexican American, Latin American, Spanish American, American of Mexican descent, and most recently by Hispanic and Chicano.

The confusion and the lack of authenticity in the referent used in identifying the Mexican American is caused by different reasons. One of those reasons is the insistence of one referent to identify all members of a group so diverse that it defies categorization (Arce, 1981). For example, Central and South Americans as a group are Latin Americans because they come from Spanish speaking countries in the Western Hemisphere. They are then individually identified according to their nationality, i.e., Venezuelans, Columbians, Mexicans. When they immigrate to the United States, they are all called Latinos. This immigrant maintains the same culture and language as multi-generation Americans of Mexican or Spanish descent. In the United States, all Spanish speakers are lumped together and identified improperly with one referent. For example, the term Hispanic was derived from the Spanish term HISPANO and is an umbrella term that includes more than persons of Mexican descent, i.e., Central and South American, that are born or naturalized United States citizens. This umbrella term alludes to the common bond of language and culture that was Spain's when it settled most of the Western Hemisphere. It is this bond that causes problems because that bond is interpreted as an allegiance to that country rather than just pride in ancestry. The Americans of Mexican descent who hold more traditional values feel HISPANO (not Hispanic) identifies them as they choose to be identified, since the larger society refuses to identify them as plain American. The more liberal and younger Americans of Mexican ancestry prefer to use a term, CHICANO, that will reflect both their more immediate ancestry (Mexico) and their nationality (United States), i.e.,their bicultural identity (Jones, 1979).

In society, a negative effect is manifested by propagating the value: TO BE AMERICAN, one must speak only English. Therefore, Americans who speak Spanish appear to negate that value; thus, their Americanism becomes suspect and they are relegated a position of hyphenated Americans. To overcome subtle and blatant forms of disdain and discrimination, these Americans adapt to the times and circumstances and acquiesce to being identified by these many different terms (Limon, 1981).

A second reason for the confusion and the lack of authenticity in identifying the Mexican American is the license given to the user. As a consequence, this privilege is abused and includes the gross misuse of other terms such as race, nationality, and ancestry when used in differentiating the Mexican American from other groups. For example, the use of "race" to differentiate the Mexican American from the Anglo American is inappropriate since both belong to the same Caucasian race. The only exception occurs when intermarriage with another race

is acknowledged; then the categorization is individually designated. Any generalization to the rest of the group is inappropriate. The confusion caused by the misuse of the term "race" is further compounded by ignorance of what designates "color." The same principle applied in differentiating "race" is applied in differentiating "color." To assume and to designate only the Anglo American as "white" is grossly inaccurate. The "color" designation of "white" is for the Caucasian race, not for only part of the racial group. In the use of "nationality" as a factor to differentiate the Anglo American and the Mexican American groups, one needs to exercise caution. Nationality, according to Webster, is "A legal relationship involving allegiance on the part of an individual and usually protection on the part of the state." Seventy-five percent (Census, 1980) of the Mexican Americans in the United States were born in the United States and, therefore, can only claim Mexican ancestry but not nationality. Those identified as Latins can only claim the Spanish language but neither ancestry nor nationality to any Central or South American country. The reality of the use of a more accurate referent, when used to differentiate the Mexican American from the Anglo American, is the term ethnicity.

A third reason for the confusion in identifying the Mexican American is the inconsistency of the use of identifiers used in comparing groups. A cogent example occurs in comparing the Anglo American, the Mexican American, and the Black American with three different identifiers. The term "color" is used to identify the Anglo American; the term "Spanish," generally used to identify language, is used to identify the Mexican American; and the term "race" is used to identify the Black American. This inconsistency not only confounds research, it confuses the issue of identification.

A fourth reason for the confusion in identifying the Mexican American is the literal translation of Spanish language referents to the English language. For example, the literal translation of "raza" to "race" created a serious problem. This translation served as a vehicle to exclude the Mexican American from the Caucasian race and further to generalize it ultimately to include "color." This generalization translated to exclude persons of Spanish and/or Mexican descent under the term "white." The term "white" consequently is inappropriately used to identify the Anglo American.

A fifth and final reason for the confusion in identifying the Mexican American is the use of the term "Chicano." This term of identification is used within the Mexican culture. The circumstances and implications under which the term was exposed to the larger society, namely the militant movement, caused the older more conservative and traditional members of the Mexican American community to avoid its use; hence, there was additional confusion.

The constant dilemma of identification will continue until the terms used in differentiating groups merely identifies rather than suggests beyond the identity. Only synonymous terms should be

interchanged. Educators, researchers, and lay people should exercise diligence in using referents accurately. They set precedence on usage.

This dilemma of a referent that can identify all Spanish speaking persons is the basis for many of the problems the Mexican American encounters in the social environment and in education. This has affected the normal development of the self and the concept of the self. Cottle (1979), a Harvard University psychiatrist, explains it this way. Being differentiated from other people, other selves, and objects requires that a person construct human boundary lines. A boundary represents the juxtaposition of diametrically opposed objects, events, and people. Boundaries contribute to our sense of what we are and what we are not, which in turn contributes to our sense of ourselves, OUR IDENTITY. The tension created by the desire for inclusion and the fear of losing one's self-identity must be weighed against exclusion from a society. This psychological dilemma affects the nature of the Mexican American and the state of the education of this American.

THE NATURE AND STATE OF EDUCATION FOR THE MEXICAN AMERICAN

The nature and the state of education for the Mexican American is viewed in light of the assumptions made about this American, in light of the philosophy and principles of learning as they are applied to Mexican American education, in light of the disparities of teacher behavior toward this American, and in light of the school facilities and curriculum offered the Chicano student.

Assumptions

The assumptions commonly made about the Chicano student are in most cases erroneous. Among these erroneous assumptions are: lack of motivation, ambition and aspirations; average or below average intelligence; inability to learn the English language; negative self-concept; and low self-expectations.

Motivation

The motivation of the Mexican American is perceived to be lacking when compared to the Anglo American. Motivation is generally measured by the persistence a person exhibits to accomplish a task. This persistence is enhanced or inhibited by the environment created by the teachers. The attitudes of some educators are tinged with "ethnic" prejudice. This popularizes the negative aspects perceived of the Mexican American student (Casey, 1976). This aspect of education of the Chicano is further discussed in the section on principles of learning.

In the area of attitudes, values, and opinions, as factors related to motivation, there are significant differences between the Anglo American and the Mexican American. The variation decreases measureably as the student progresses in school. The socialization process is progressively noticeable from the sixth to the ninth to the twelfth grades (Garcia, 1981).

In early research (Coleman, 1966; Barth, 1969), lack of motivation was related to language maintenance. Research done later (Padilla and Long, 1971; Garcia, 1980) showed that Chicanos in college demonstrated higher levels of academic success, which reflects motivation, when they came from homes with high Spanish usage. Further, these researchers found bilingualism to be the most important determiner of academic success and positive self-concept.

Ambitions and Aspirations

The lack of ambition and aspirations attributed to the Mexican American is perceived to be a result of the culture. However, Carter (1970) found that educators based their plausible explanations of "low educational and occupational aspirations, ...and lack of ambition" and their perceptions of Mexican American children on scarce factual information and possible Anglo American misinterpretation of Mexican American behavior. A semantic differential questionnaire administered by Carter (1968) seeking a self-measure of intelligence, power, goodness, and happiness revealed a distribution of responses almost identical for both the Mexican American and the Anglo American group.

Researchers (Wilson, et al., 1953; Thomas, et al., 1968) looked at the educational aspirations of the "drop outs" and found that the majority desired at least a high school education. Grebler, et al., (1970) found the aspirations of both--Anglo and Mexican American children--to be very high, comparatively speaking.

Intelligence

The average or below average measures of intelligence attributed to the Mexican American have been interpreted without the use of cautions and limitations recommended by the authors of the testing instruments. Some researchers (Jensen, 1969; Coleman, 1966) advocated inferior intellect based on results of inappropriate standardized tests. Besides the inappropriate use of tests, the language proficiency of the student was not considered in interpreting results.

English Language

The supposed inability of the Mexican American to learn the English language is attributed to the students' resistance to acculturate. Ryan (1971) stated that when minority groups resist inclusion, i.e., acculturation/assimilation, they are often regarded by the dominant society as "deviants." Cardenas (1975) contends that competency of the English language, comparable to that of an English speaker, can be accomplished by providing adequate instruction to the student.

The failure to provide English language instruction to non-English speaking students was ruled unlawful in the Lau v. Nichols case. The Lau v. Nichols class action suit against the San Francisco Unified School District was filed initially to provide a meaningful opportunity for an education to a large Chinese population. The Supreme Court relied on S.601 of the Civil Rights Act of 1964 to set up rules and guidelines in the development of an instructional program for non-English speaking students.

Self-Concept

The negative self-concept of the Mexican American is generalized from its position in the larger society. Hernandez (1967) explains that the Chicano youngsters tend to assign themselves to an inferior position in the larger society because "they are aware of the stigma of second class citizenship. Early in their development, they realized the role assigned to them by many members of the Anglo American society and, feeling the discrimination, have reacted with a mechanism behavioral scientists call self-hatred."

Studies done on identity and values and value conflict (Madsen, 1964; Ramirez, 1967) indicate the cultural marginality of many Mexican Americans. This marginality contributes to the problem of self-identity and negative self-concept. Self-concept suggests the internalization of the values and expectations, the roles and opinions of the larger society (Carter, 1970). However, Carter (1970) found that these explanations were based on scarce factual information or misinterpretations of the Mexican American behavior.

Expectations

The supposed low expectations of the Mexican American are perceived by his/her measured achievement. De Leon (1982) found that what Anglo scientists posited was quite the opposite. He states the Mexican American did not achieve what the Anglo did because of the oppressed situations. Achievement is influenced by all the factors mentioned above and by many others. Among the other factors are adequate curriculum and adequate measures of the learning induced by that curriculum.

Philosophy and Principles of Learning

The philosophy and principles of learning common to the American system of education are addressed to provide a context for the education of the Chicano within that educational system.

Philosophy

The "melting pot" philosophy of the American system of education has institutionalized barriers for anyone who does not fit the norm it dictates. That norm requires anyone wanting to participate in its society to reflect or to imitate what is representative "American." To be "American" is to be English monolingual, to be "white" in culture and beliefs, and to be of the Protestant ethic. The requisite of the acquisition and use of the English language denigrates the knowledge and use of another language, and it is perceived as a

violation of the norm when another language is maintained. The Chicano acquires and uses English but also maintains the knowledge and use of Spanish. This is seen as a liability and, consequently, affects the teachers' perceptions of these students and almost inevitably leads to the educational failure of many Mexican American students. Although the student comes with a language, has absorbed a culture, and has gained a sense of values and traditions, all this prior learning is regarded as valueless. From the time the Mexican American student enters school, there is an abrupt change which for many students is shattering.

This philosophy contradicts not only the principles under which this country was founded but also contradicts the principles of learning espoused by the same educational system which alludes to the need to recognize individual differences. Recognition of individual differences is advocated by Skinner, Spence, and other psychologists so that meaningful learning can occur. Meaningful learning occurs when individual differences are recognized and when principles of learning are adapted to the learner.

Principles of Learning

The American system of education promotes the application of learning theories in instruction. Many contemporary theories are classified into two major families: behaviorist and Gestalt-field. Some of those theories are operant conditioning (Skinner, 1938), quantitative S-R theory (Spence, 1960), behavioristic-eclectic theory (Gagne, 1970), and cognitive-field theory (Lewin, et al., 1936). Among the many theories of learning, certain common basic working principles of learning are accepted by modern psychologists regardless of the school of psychology. These principles are not clearly attached to either S-R conditioning or Gestalt-field outlook but are widely stated by authors irrespective of the school of psychology these authors embrace. Authors state these principles because the application leads to somewhat similar classroom results.

Five of several learning principles will be discussed generally and then specifically as they relate to the education of the Chicano student. The five learning principles are motivation, readiness, practice, meaningfulness, and overlearning.

First Principle. The first principle is MOTIVATION IS CENTRAL TO LEARNING. Motivation is observed as a state of tension created by an unsatisfied physiological or psychological need. This tension causes the person to direct purposeful energy to fulfill that need. The motivation is measured by the extent of persistence used to fulfill the need. In a classroom context, the teacher becomes the facilitator to induce a student to attend to a situation, to perform and act on it, and to become aware of the consequences following the act. The interactive nature of the most productive classroom situation requires both student and teacher to test their attitudes, values, skills, and

knowledge. Educational psychologists (Stephens and Evans, 1973) emphasize a medium of democratic classroom climate to help induce personal involvement required to perform.

This first principle when applied to the teaching of students of English as a second language, such as the Mexican American student, generally warrants very special application. The interaction indicated by the principle suggests a common language. The lack of a common language required for interaction affects attitudes. For example, a teacher's attitude toward bilingualism can create a negative or positive effect on the learning environment and can inhibit or enhance the student's personal involvement in that environment. Carter (1970) states that teachers who see bilingualism as a liability and as a source of mental confusion reflect their own difficulty in learning a foreign language. This view may also reflect their training. This teacher's attitude affects the learning environment negatively. In contrast, teachers who view knowledge of two or more languages as an asset and as a sign of a "cultured" person are likely to affect the learning environment positively. The learning environment created determines the extent of the student's personal involvement and, consequently, the actual or perceived motivation.

This first principle, when applied to value orientation of the Chicano student, must be applied with sensitivity. The value orientation of the Mexican American tends to be perceived as similar to traditional folk culture (Carter, 1970). The teachers who have this perception affect the learning environment negatively, since generally "traditional folk culture" translates to conflict with the larger society's values. An example of this conflict is best stated by Zintz (1963): "seeing success more in terms of interpersonal relationships than in terms of material acquisition" conflicts with the larger society's view of "seeing success in terms of working hard for future success."

This first principle, when applied to the skills and knowledge of the Chicano student, must be considered in light of former instruction. The learning of skills and the accumulation of knowledge are affected by the number of years of instruction as well as by the level of language the student possesses during that instruction. The student's knowledge may lack the sophistication of the English language used in instruction and, as a consequence, the level of skills and knowledge required to interact in the classroom may appear to be less than that expected.

When all these factors are considered, the environment created by the teacher determines the effectiveness and the extent of personal involvement and the consequent motivation of the student, particularly the Mexican American student.

Second Principle. The second principle of learning is READINESS FOR LEARNING. Professors Bruner and Piaget and others agree that physiological maturation and experiential background are key

ingredients to this principle. However, each regards the source and nature of readiness differently. Bruner (1969) believes that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development." In contrast, Piaget believes that the child is able to learn certain matters at certain biological stages of development and that it happens at definite ages.

The principle of readiness when applied to the schooling of a Mexican American student needs to be evaluated from facts, not from assumptions. The assessments must be judged pragmatically in light of the knowledge of the English language. Development of readiness skills can effectively be taught in the child's own language while English is learned. Studies (Troike, 1978; Cardenas, 1975) show that students who are taught readiness skills in their mother tongue exceed the mean of the readiness skills of the control group when measured by readiness tests. In addition, the attendance of these students was also better than that of the control group.

The Mexican American children mature physiologically as any human being--individually. The experiential background is a function of income, education, and the extent of acculturation of both parents and the child. This affects the readiness of the Chicano students when they must meet the standards of the American system of education. This readiness must be related to the principle of practice in learning.

Third Principle. The third principle is PRACTICE SPEEDS LEARNING. This principle suggests that the more a skill is practiced the better the skill becomes. When this principle is applied to instruction of the Chicano student, the application might require additional practice. This additional practice is relative to the level of sophistication of the students' language and reading knowledge. The less language facility the student has, the more practice via non-verbal means or in the mother tongue will be needed. This practice must be meaningful so that it links with the principle of learning and retaining.

Fourth Principle. The fourth principle is MEANINGFUL MATERIAL IS LEARNED MORE RAPIDLY AND RETAINED LONGER. Meaningfulness is the idea of grasping relationships between fact, generalizations, rules, and principles for which students see some use (Bigge, 1976). The selection of the right content--knowledge reducible to principle--and application of the principles to situations students are familiar and concerned with contribute to the retention of learned material (McDonald, 1965). Content that has meaning, regardless of its structure, is remembered in proportion to its meaning (Stephens and Evans, 1973).

This principle is of special significance when applied to the education of the Chicano student. Mexican American students lack a meaningful curriculum (Carter, 1970; Grebler, et al., 1970; U.S. Commission of Civil Rights, 1974). All these researchers found that the curriculum rarely included programs or designed courses to meet

the particular needs of these students. The irrelevant curriculum creates a situation that almost inevitably leads to the educational failure of the Chicano student. However, Troike (1978) found that when Mexican American students are provided with a meaningful curriculum, they scored significantly higher in the areas of reading, English, math concepts, and writing than the control groups. Therefore, since students come with language, a culture, a sense of values, and traditions, the curriculum must be relevant to these factors which will help students to adjust to the educational system. In this context, the application of the principle of overlearning can best be discussed.

Fifth Principle. The fifth and last principle to be discussed is OVERLEARNING. This concept suggests that learning is good but that overlearning is better. This overlearning helps a student gain confidence in the skill and/or the knowledge acquired. This principle, when applied to the schooling of Mexican American students, can only be evaluated in the context of the curriculum, the learning environment, and the teacher's sensitivity to these students. The more familiar and concerned the student is with what is being learned, the more rapidly the material will be learned and the longer it will be retained; consequently, it is more likely that the student will engage in overlearning. This positive behavior is further enhanced by creating a learning environment conducive to learning. Teachers who are sensitive to needs of students, in particular to Mexican American students, will create this environment and provide a meaningful curriculum.

In summary, principles of learning are important and, when appropriately applied, enhance learning. The schooling of Mexican American students requires that these principles be adapted to the circumstances of the instruction. For example, assess the student's knowledge, start there, and move forward.

Disparities of Teacher Behavior

In a survey (1969), a Civil Rights Commission found disparities in teacher behavior between Mexican American and Anglo American students as measured by a modified Flanders Interaction Form. The disparities indicated that teachers gave Mexican American students:

1. Less than average amount of praise or encouragement
2. Less than average amount of acceptance and use of ideas per pupil
3. Less than average amount of positive response per pupil
4. Less than average amount of teacher questioning per pupil

5. Less than average amount of all non-criticizing teacher talk per pupil

6. Less than average amount of speaking per pupil by Mexican American than by Anglo students

Haro (1977) studied the concept of teacher behavior from a different aspect--the student's perceptions. He attempted to get insights from truant and low achieving students in two East Los Angeles schools. Haro used Luis Cervantez' (1965) model of potential school dropouts and Cuzick's (1973) research model on adolescent behavior in a high school setting. The findings indicated students' (1) disapproval of several characteristics of school, such as routine of activities and the school's rules and regulations; (2) disapproval of characteristics of "bad" teachers, i.e., not interested in the student, not giving individual help to the student, prejudiced behavior, embarrassing the student, screaming and yelling at the student, and being grouchy with the student; (3) inappropriateness for Chicanos to get involved in the activities of the school; (4) perception that a division exists between the high school and the Chicano community. These findings reveal that disparities of teachers' behavior are perceived by students.

Laosa (1977) conducted a study on the influence of student ethnicity and degree of bilingualism on classroom interaction. The results of the study indicated that both ethnicity and language dominance had a significant effect on classroom interaction and that it varied as a function of grade level. Laosa considers the "types of interactions" that students experience in the classroom the "single most important component of school quality." His research is similar to those already cited above. All these results suggest that teachers behave differently toward ethnic minorities than toward non-minority students.

Amodeo and Martin (1982) reported findings which appear to indicate very little change in teacher behavior toward Mexican American students. Their study was done to analyze the effects of multicultural educational training on the factual knowledge and stereotypical attitudes of elementary and secondary teachers toward culturally different students. The subjects were 27 graduate students, all elementary or secondary school teachers. Their findings revealed that female teachers had less stereotypic attitudes as the number of years in the profession increased. The opposite occurred with male teachers. The males' stereotypic attitudes increased with the number of years in the profession. The results indicated that elementary teachers who had taught more than three years had less stereotypic and more positive attitudes. In contrast, stereotypic attitudes of secondary teachers became more negative when they had taught more than three years. The authors do not explain what caused these behaviors.

These studies' (Commission, Haro, Laosa, Amodeo and Martin) findings give parents, teachers, and administrators positive

guidelines to institute an effective communication system, to initiate an innovative alternative curriculum plan, and to use as a tool to recognize symptoms of truancy and low achievement that are related to teachers' behavior toward students.

Inequities of School Facilities

Inequities of school facilities have been an issue in the education of the Mexican American. The tax formulas use different bases for property tax calculations that affect the tax dollars produced. In districts where Fair Market Value is the base, poorer districts naturally produce less tax and have less dollars to spend on education.

For example, the Texas Education Agency reported a total of 2,785,296 students enrolled in grades PreK-12 in 1975. Of these, 657,123 or 23.6% were Spanish surnamed. Students enrolled in bilingual education programs were 114,502 or 17%.

That same year the Texas Legislature passed House Bill 1126 which appropriated an increase of $653 million in state funds for public school finance. The impact of this bill was the provision of equalization funds. This was of major importance to low tax wealth districts. The Intercultural Development Research Association (IDRA, 1975) in San Antonio, Texas did an analysis of the dollar impact on school districts in Texas. They labeled it "disappointing." School districts which were preparing budgets were given estimates of $70 per student. The actual maximum aid resulted in $57 per student. The poorer districts which were unable to raise matching funds got smaller entitlements.

The 1968 California case of Serrano v. Priest revealed that there were marked differences in per pupil expenditures, i.e., Berkeley $1,261 v. Calexico $581. These expenditure disparities were explained by the considerable differences in wealth and assessed property value of the state's school districts (Dominguez, 1977). For example, the Calexico area with 90% Chicano population has less wealth, thus, less money expended per pupil.

Irrelevant Curriculum

Dr. Jose A. Cardenas, Executive Director of the Intercultural Development Research Association (IDRA), recognized the narrow legal interpretation of the Lau v. Nichols case and outlined some remedies to consider in developing comprehensive education programs for the Mexican American. The general areas were: (1) potential student indentification (2) student language assessment, (3) achievement data, and (4) program offerings.

In identifying the potential student, Cardenas considered three required criteria. The first was the student's first language, the second was the language spoken in the home, and the third was the language most spoken by the student. If the language was other than English, that would identify a target student.

Assessing the students' language competency and dominance would classify them into five categories (Gil, 1975):

1. Monolingual in a language other than English
2. Predominant speaker of a language other than English
3. Bilingual, i.e., has equal facility in English and some other language
4. Predominant speakers in English, though they know other languages
5. Monolingual in English, speaks no other language

Dr. Cardenas did not recommend required placement of a potential target student in a bilingual program. However, if the potential student was underachieving, he felt that the school system should be required to conduct a diagnosis of the learning problem and prescribe an individual educational plan. The indicators used were one standard deviation below the mean of Anglo achievement.

The remedial program was to provide two educational services for students, one for the monolinguals, or predominant speakers of a language other than English, and the other for predominantly English speakers. These two programs must be compatible.

MEXICAN AMERICAN'S PARTICIPATION IN THE EDUCATIONAL PROCESS

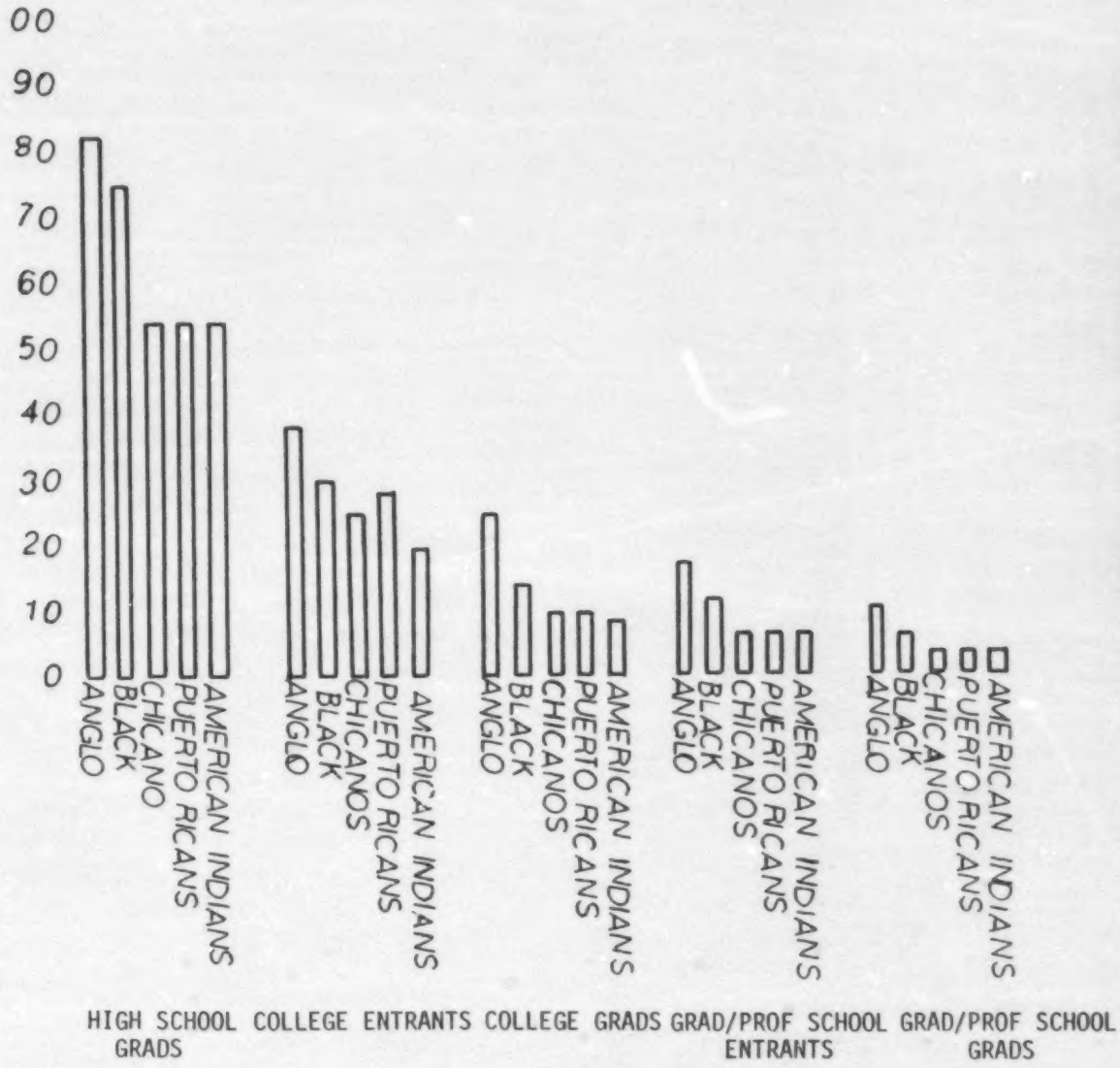
Mexican Americans have met barriers to their participation in the educational process in the areas of access, educational attainment, and retention. The barriers encountered at all stages of the educational cycle and the cumulative damage from these barriers has long been researched (Rubel, 1966; Grebler, et al., 1970; Higher Education Research Institute, 1982). The statistical data and reports document the substantial and severely disadvantaged educational condition of all Hispanics, particularly the Chicano. The Commission of Higher Education of Minorities illustrates in their 1982 final report the effect of barriers on the education cycle for minorities generally and for the Mexican American specifically (Graph 1, page 19.)

Arce (1973) discussed and assessed the higher education of Chicanos up to that time. He assessed two needs: (1) core faculty, and (2) institutions that have as their number one priority the education of Chicanos. He considered both needs as "sadly wanting." He further illustrated via a "Model of Chicano-Academe Contact" that Chicano Studies Programs rarely had department status and that the programs were isolated from students in their hierarchical ladder.

Access

Chicano participation in the education process has been limited by traditional policies. Elementary and secondary students were admitted with less difficulty in school. Their first experience in the classroom is generally in a language many cannot understand. In instances where bilingual education or intensive English classes are provided as part of the curriculum, the children progress excellently. In other cases, progress is slower and the achievement results reflect the slower progress.

At the college level, one factor affecting access is the admission criteria. Admission criteria effective in selecting academically qualified students from the larger society have been found to be discriminatory for minority groups (Whinfield, 1981). Another factor affecting access to college for Chicano students is the counseling services in high schools.



Graph 1. The Educational Pipeline for Minorities*

*Adapted from information from La Red, 1982.

Mexican Americans are generally informed of vocational training and two-year college options rather than four-year colleges and universities or professional schools. For example, De Los Santos (1980) found only 2.9% full-time enrollment in public universities as compared to 6.4% enrollment in two-year colleges. Mexican American students are generally first generation high school and/or college students. They rely on school personnel to advise and counsel them. Most parents are uninformed about college entrance requirements, financial aid, or career information and, therefore, must rely on school personnel for guidance. The table on the following page illustrates a sampling of the education of a group of fathers.

Preer (1981) researched minority access to higher education. The finding regarding the pool of minority applicants was that preparation of Hispanic and Black secondary school students was inadequate. She concluded that this may be a factor in their under-representation in four-year colleges and the over-representation in two-year colleges. She also stated that the issue of designing more equitable admission procedures also affects the minority representation at four-year institutions. Institutions who use standardized test results as a predictor of success in college, are knowingly establishing psychometric barriers for minorities. Zarate (1976), in her study done at a university in New Mexico, also found no significant statistical correlation between standardized test results and success in college.

Other barriers that are perceived by some constituencies as denying access include: educational cost to students, lack of needed programs, lack of programming in some geographic areas, inadequate student information on programs available, inadequate program consideration of cultural diversity of the population and other background characteristics, inadequate staffing facilities for the handicapped, lack of flexibility in programs and their delivery, and difficulty in moving from institution to institution or from one educational level to the next.

Educational Attainment

The educational attainment of Mexican Americans has consistently been measured by standardized tests. The lower-than-average scores when compared to the achievement of Anglo Americans has been a factor in stifling the attainment of Mexican Americans. Wolfle and Lichtman (1981) indicated that two possible explanations exist for the differences in educational attainment among Mexican Americans and the larger society members. The explanations are that "either the process of educational attainment varies; (or that) if it does not vary then the 'whites' start with social advantages the others...do not enjoy." They conclude that differences in the educational attainment appear to be primarily a function of differential level of social and economic background and that an equalized outcome cannot occur since social and economic backgrounds begin unequally.

Table 1

FATHER'S EDUCATION

(Percentages)

Subgroup	Total	Less Than High School	At Least High School but Less Than 4 Years College	4 Years College or More	Sample Size[1]	Didn't Know Father's Ed.
Sophomores						
Mexican American	100.0	52.3	40.7	7.0	2,009	23.9
Non-Hispanic Whites	100.0	18.2	54.0	27.8	955	17.5
Seniors						
Mexican American	100.0	50.6	40.4	9.0	1,798	15.5
Non-Hispanic White	100.0	19.7	54.4	25.9	968	9.1

[1] "For comparison purposes and to reduce computation costs, sample random subsamples of 1,000 non-Hispanic Whites and 1,000 non-Hispanic Blacks were selected for the analysis. The sample sizes reported in the table reflect the actual number of students who provided data for the analysis."
(National Center for Education Statistics Bulletin, July, 1982)

Robinson (1981), in researching factors that influence the performance of bilingual Hispanic students in math and science related areas, identified academic preparation, motivation, and social and economic status as factors. These factors could be the possible causes for different achievement attainment. He concluded that the key in solving the dilemma of improving academic performance of Hispanic students was awareness of and compensation for academic deficiences. This writer suggests parity in economic and social status and role models that will influence academic performance.

In 1981, Slark and Bateman did a study to determine if a relationship existed between English communication skills and a student's educational success. The enrollment at the college is 50% non-native English speakers; their sample consisted of 53% of all the students enrolled in the sample classes. The Nelson Denny Vocabulary and Comprehensive tests were used to measure English ability. A second measure was the Comprehension English Language Test (CELT) of listening.

The findings of the study included: (1) Spanish and Vietnamese were the two non-English languages most used; (2) generally, fewer A's, B's, C's, and D's were earned in the sample classes than in Santa Ana College as a whole; (3) significant positive correlations were found between test scores and grades in humanities courses, while negative correlations were found in math, music, and chemistry; (4) as a whole, grades for both groups (non-native and native speakers) were comparable; (5) a tendency of success favored students who had completed English courses.

From these findings one can conclude that the greater the English communication skills a student possesses, the greater the chance for success in courses where the English language is needed.

The educational attainment of the Mexican American revealed by census statistics show a notable quantitative gap (Table 2, page 23).

As far back as 1930, George Sanchez stated that familiarity with vocabulary and language used on tests might affect Hispanics' performance. In 1982, Donald Alderman researched this issue. The sample consisted of 400 students attending public and private high schools in Puerto Rico. Alderman examined two competing hypotheses. One hypothesis was "that students' verbal and mathematics subscores on the SAT would be predicted well from student's verbal and mathematics subscores on the Prueba de Aptitude Academica (PAA)." The competing hypothesis was "that SAT subscores would be predicted better from PAA subscores if English proficiency test scores were taken into account." He further postulated "that there was an interaction between PAA subscores and English proficiency test scores." This was interpreted to reveal a different relationship between SAT and PAA scores with high English proficiency from those with low English proficiency test scores.

Table 2

The Schooling Gap

	1960		1970		1980	
	M.A.	A.A.	M.A.	A.A.	M.A.	A.A.
Median Years	8.1	12.0	8.3	11.3	9.1	12.1

Adapted from information from the census.

The results of this study supported the conclusion. There was a statistically significant interaction between PAA scores and language proficiency measures in predicting SAT scores. Alderman stated that "students apparently need a fairly strong command of English as a second language in order to succeed in demonstrating abilities evident on tests given in their first language when taking comparable tests in English."

These results are valuable to educators of students who have received formal instruction in Spanish and, therefore, can read and write Spanish (Table 3, page 25). However, caution must be exercised in generalizing about American-born students who only speak Spanish but do not receive formal instruction in Spanish nor receive instruction in English as a second language. There will be a diversity of language proficiency across the two languages. What is more important in standardized assessment of this type of student is that, even though the student may have more skills in English than in Spanish, this type of student is still less familiar with the English language requirements of the standardized tests than those for whom English is the first language. This affects the interpretation of English aptitude measured by these tests. Appropriate application needs to be exercised in using these test results.

Ramirez and Castaneda (1974) researched students' cognitive styles. They found that Mexican Americans have particular ways of perceiving and organizing. Their research also suggests Mexican Americans are bi-cognitive. Mexican Americans are taught how to learn by being socialized into the culture, and this socialization leads to distinctive modes of learning.

The National Center for Education Statistics (1980) released information on the years of schooling of sophomores and seniors of the two groups--Anglo American and Mexican American. They are reported in percentages of the sample used (Table 4, page 26).

The academic achievement of the Mexican American based on average scores in mathematics, reading, and vocabulary tests are compared to the non-Hispanic white. Table 5 (page 27) shows the results with background factors considered. Multiple regression analyses were done on a number of background characteristics. A positive correlation (a proportionate increase in one variable with an increase in the other) was found between English proficiency and math and reading scores, Spanish proficiency and math and reading scores, socioeconomic status of the family and math and reading scores. A negative correlation was found between the test scores in math and reading and the frequent use of Spanish.

The National Assessment of Educational Progress, funded by the National Institute of Education and administered by the Education Commission of the States, surveyed 24,000 nine-year olds, 1,500 of them Hispanics. The survey included three types of reading skills: the ability to identify words, phrases, or facts; the ability to infer

Table 3

LANGUAGE USAGE AT HOME

SPRING, 1980

GROUP	Sample Size	English Monolingual[1]	English-Dominant Bilingual[2]	Spanish-Dominant Bilingual[3]	Spanish Monolingual[4]
Sophomores					
Mexican American	2,082	36.2	31.9	20.7	11.1
Seniors					
Mexican American	1,867	29.8	38.2	20.5	11.5

Source: National Center for Education Statistics Bulletin, July, 1982

Table 4

YEARS OF SCHOOLING

SPRING, 1980

GROUP	Sample Size	Less Than High School Completion	At Least High School but Less Than 4 Years College	4-Year College Degree	Master's Degree	PhD, MD, or Other Advanced Degree
Sophomores						
Mexican American	2,031	2.5	69.5	14.0	6.6	7.3
Non-Hispanic White	971	1.0	55.6	25.0	8.7	9.7
Seniors						
Mexican American	1,857	1.1	65.3	19.0	8.6	6.0
Non-Hispanic White	977	0.2	56.2	23.9	10.7	9.0

Source: National Center for Education Statistics Bulletin, July, 1982

Table 5

MEAN SCORES ON MATHEMATICS, READING AND VOCABULARY TESTS

SPRING, 1980

GROUP	MATHEMATICS			READING			VOCABULARY		
	Sample Size[1]	Mean Score	Standard Deviation	Sample Size	Mean Score	Standard Deviation	Sample Size	Mean Score	Standard Deviation
Sophomores									
Mexican American	1,864	7.5	3.5	1,865	2.7	1.7	1,862	2.9	1.6
Non-Hispanic White	930	10.3	3.8	931	3.9	2.0	933	4.1	1.9
Seniors									
Mexican American	1,621	8.4	4.0	1,632	3.3	1.9	1,628	3.5	1.8
Non-Hispanic White	893	11.6	4.0	901	4.9	2.0	898	4.8	1.9

Source: National Center for Education Statistics Bulletin, July, 1982.

a meaning; and the ability to use reference materials. The results in 1980 indicated that Hispanics improved their reading skills twice the national average for nine-year-olds within a nine-month period yet remained below national reading levels. Overall, the reading scores for all the children did not change significantly.

Retention.

The retention of minority students is an issue of long standing. Like any well-built structure, the foundation of that structure is crucial. So it is with the Chicano student. The Chicano student who comes to school with a first language other than English needs a strong English language component. The student must be taught not only the literal use of the language but also the implied use of the language. For example, the student needs to be made aware that there is a suggested meaning to statements that are made and that the words used must be looked at from that standpoint. In other words, the student must be taught to manipulate the language. Johnstone (1981), in researching student achievement as it relates to ethnic differences, found linguistic differences and vocabulary as a key component of achievement. Johnstone defined achievement as "a set of interdependent components representing degrees of knowledge of various subject areas." If this is accepted, then by necessity the next strong component is reading. As the student's knowledge of English increases, the skills of reading must increase. These skills must move from the reading of lines, to reading between the lines, to reading beyond the lines. Anything less is inadequate reading instruction. Anything less handicaps the student's achievement as measured by standardized tests. The student's increased achievement will affect retention.

In addition to a relevant curriculum, our schools need faculty and professional staff who are sensitive to diverse minority needs. These diverse needs include the need for recognition of cultural identity; the need for psychological, emotional, and academic support; and the need for attainment of fundamental skills. The personnel must be trained in teaching or counseling those students, who are in many instances unprepared, so that they can progress. In the recruitment of personnel, one characteristic must be evident--commitment to the instruction of all students.

To complement the academic and personnel components, the development of campus services responsive to students' linguistic and cultural traditions should provide a well-rounded institutional environment.

SUMMARY

The history of education of the Mexican American is one of educational neglect. A change in societal factors would mean more equitable access and greater difference in educational attainment and in economic and societal assignment for the Mexican American. The low teacher expectations, societal conditioning to "in" and "out" groups, and reports quoting and popularizing the low achievements of minorities when compared to Anglo Americans continue to contribute to the lower educational status of the Mexican American.

The research indicates that Mexican Americans can achieve when provided with the mechanisms and programs that create a positive environment that teaches them skills and that provides them an opportunity to become proficient in the English language without any need to give up their first language. The Mexican American's progress is greatest when the opportunities are greatest. The stalemate occurs when those opportunities are unavailable.

The future appears to be a repeat of the former decades. Access is less universal, attitudes are the same, curriculum offerings remain almost the same, and money as financial aid is tighter. This lack of progress suggests that the education of the Mexican American is at a stalemate.

RECOMMENDATIONS

The elementary schools need to provide an educational program that will help Mexican American students learn and progress within the system.

The post-secondary school admission criteria is mainly from Haro (1978). The criteria recommended to become an integral part of regular admission policy for undergraduate and graduate programs include the following five areas:

1. Traditional quantitative criteria of GPA and scores on nationally standardized tests. Establish group norms to identify high achievers within each group. This interim modification cannot be done until equal opportunity is provided to minority and poor students.

2. Mexican American Legal Defense amd Educational Fund (MALDEF), the California Supreme Court recommended inclusion of economic, educational motivation, and societal needs criteria as part of the regular admissions policy of both undergraduate and graduate level.

3. Incorporate a recruitment and selection process based on geographic criteria. Selection from each high school district would be done on a percentage basis, i.e., 12%.

4. As part of regular admission policy, applicants be given an option to take "culture-specific" tests developed to predict the potential for academic success in addition to current nationally standardized achievement tests.

5. Include a racial/ethnic classification of applicants as part of regular admissions policy.

Alexander Astin (1982), President of the Higher Education Research Institute, outlines over sixty recommendations based on data gathered by the Commission on the Education of Minorities. Only seven are included here:

1. Re-examination of current policies and practices
2. New testing and grading
3. Pre-collegiate education
4. Academic and personal support systems
5. Equality in access
6. Financial aid
7. Minority faculty and administrators

The Commission on the Education of Minorities suggested practical ways of meeting the recommendations. Among them are:

1. Better career counseling

2. Revised equal access policies that consider the type, quality, and resources of institutions entered

3. Strong minority leadership at the community level

The writer makes two recommendations, the first based on research (Rowold and Cook, 1981) and the second based on experience working with freshmen in several universities:

1. Mode of delivery of instruction is to be accommodated to the cognitive styles of learning of Mexican American students.

2. A formula for adjustment of English language instruction is to be used to recognize the advantage an English monolingual has in standardized test taking. The Zarate formula is to be used to estimate the difference in test scores.

EXAMPLE:

$$\text{Raw Score} \times \frac{\text{Years of Formal English Instruction}}{\text{Chronological Age}} = \text{English Language Adjustment Quotient}$$

$$\text{ACT Score } 10 \times \frac{12}{20} = 6 \text{ then } 10 + 6 = 16$$

16 Score used for admission. Course placement for Mexican American must be complemented with developmental reading, writing, and English courses to increment the skills already possessed.

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APPENDIX A

Sample Litigation on Behalf of the Education of the Mexican American (not all inclusive)

1946 Mendez v. Westminister School District

1951 Gonzalez v. Sheely

1964 Civil Rights Act

1970 Lau v. Nichols

1971 United States v. Texas

1982 Otero v. Mesa Valley County

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Narcisa Zarate was born in Dona Ana County, New Mexico. She received her elementary schooling in San Miguel, New Mexico and her secondary schooling in Anthony, New Mexico and El Paso, Texas. Dr. Zarate received a Bachelor of Science in Education from the University of New Mexico (Albuquerque) and her Master of Arts in Counseling and Guidance and Doctorate of Education in Curriculum and Instruction with a specialization in reading from New Mexico State University (Las Cruces). She has done post-doctoral work in research at Mills College, Oakland, California.

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